AMENDMENTS TO THE CLAIMS

1.   (currently amended)   A method for establishing a connection with a mobile node, the method comprising:

receiving a registration request;

determining a tunnel identifier, wherein the tunnel identifier is independent of (i) a home address of the mobile node and (ii) an address of a home agent;

transmitting the registration request to the [[a]] home agent, the registration request including the tunnel identifier;

receiving a response to the request and, responsively, activating a connection;

receiving data packets from the home agent in response to [[the]] transmitting the registration request, the data packets including the tunnel identifier;

identifying the connection using the tunnel identifier; and

routing the packets along the connection.

2.   (currently amended)   The method of claim 1 wherein the data packets received from the home agent include[[s]] a header and the header includes the tunnel identifier.

3.   (original)   The method of claim 2 further comprising extracting the tunnel identifier from the header and locating a tunnel table entry in a tunnel table.

4.   (original)   The method of claim 3 wherein the tunnel table entry indicates an entry in a connection table.

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5. (currently amended) A method for establishing a connection with a mobile node, the method comprising:

receiving a registration request from a mobile node, the mobile node having a home agent, the registration request also representing a call;

assigning a tunnel identifier to the call associated with the registration request, wherein the tunnel identifier is independent of (i) a home address of the mobile node and (ii) an address of the home agent;

forwarding the registration request to the home agent, the request including the tunnel identifier;

establishing a connection;

receiving a registration response and forwarding the registration response to the mobile node;

receiving packets of data from the home agent, each of the packets of data including the tunnel identifier; and

subsequently, using the tunnel identifier to identify determining the connection for packets having the tunnel identifier.

6. (currently amended) The method of claim 5 wherein using the tunnel identifier to identify the connection the tunnel look-up includes looking in a connection table for connection information corresponding to the tunnel identifier.

7. (currently amended) The method of claim 6 wherein the connection information is from the point-to-point [[(PPP)]] protocol (PPP).

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8.   (currently amended) The method of claim 5 wherein each of the packets includes a header and the header is a <u>Generic Routing Encapsulation (GRE)</u> [[GRE]] header.

9.   (currently amended)   A method comprising:

receiving a registration request;

receiving a data stream, the data stream associated with the registration request, the data stream including a plurality of packets;

assigning an identifier to the data stream<u>, wherein the identifier is independent of (i) a home address of a mobile node and (ii) an address of a home agent for the mobile node</u>;

transmitting the registration request to <u>the</u> [[a]] home agent, the registration request including the identifier;

receiving return packets of information, the <u>return</u> packets of <s>return</s> information including the identifier; and

translating the identifier into a connection and transmitting the return packets using the connection.

10.   (original)   The method of claim 9 wherein the step of translating includes establishing a tunnel table, the tunnel table having entries corresponding to tunnel identifiers.

11.   (original)   The method of claim 10 wherein the step of translating includes establishing a connection table, the connection table including connection information for entries in the tunnel table.

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12. (currently amended) The method of claim 11 wherein the connection table includes information according to the point-to-point protocol (PPP) format.

13. (currently amended) A system comprising:

a mobile node;

a packet data-switching node (PDSN) [[PDSN]], the PDSN communicatively coupled to the mobile node, the PDSN receiving a registration request from the mobile node, the PDSN assigning a tunnel [[an]] identifier to a plurality of packets received from the mobile node;

a home agent coupled to the PDSN, the home agent receiving and storing the tunnel identifier in the registration request and sending return packets to the PDSN including the tunnel identifier;

wherein the tunnel identifier is independent of (i) a home address of the mobile node and (ii) an address of the home agent;

wherein the PDSN receives a response message from the home agent and establishes a connection between the mobile node and the home agent; and

wherein the PDSN extracts the tunnel identifier from the return packets and translates the tunnel identifier into information representative of the connection, and transmits the return packets on the connection.

14. (original) The system of claim 13 wherein the tunnel identifier is included in a header in the return packets.

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15. (original) The system of claim 13 wherein the connection is made according to the point-to-point protocol (PPP).

16. (currently amended) The system of claim 13 wherein the PDSN includes a tunnel entry table and a <u>point-to-point protocol (PPP)</u> [[PPP]] connection table.

17. (currently amended) A system for establishing a connection with a mobile node, the system comprising:

means for receiving a registration request;

means for determining a tunnel identifier<u>, wherein the tunnel identifier is independent of (i) a home address of the mobile node and (ii) an address of a home agent</u>;

means for transmitting the registration request to <u>the</u> [[a]] home agent, the registration request including the tunnel identifier;

means for receiving a response to the request and, responsively, activating a connection;

means for receiving data packets from the home agent in response to [[the]] transmitting the registration request, the data packets including the tunnel identifier;

means for identifying the connection using the tunnel identifier; and

means for routing the packets along the connection.

18. (currently amended) The system of claim 17 wherein the data packets received from the home agent include[[s]] a header and the header includes the tunnel identifier.

19. (original) The system of claim 18 further comprising means for extracting the tunnel identifier from the header and locating a tunnel table entry in a tunnel table.

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20.   (currently amended)   The system of claim 19 wherein the tunnel table entry indicates an entry in a <u>point-to-point protocol (PPP)</u> [[PPP]] connection table.

21.   (currently amended)   A system for establishing a connection with a mobile node, the system comprising:

means for receiving a registration request from a mobile node, the mobile node having a home agent, the registration request also representing a call;

means for assigning a tunnel identifier to the call associated with the registration request<u>, wherein the tunnel identifier is independent of (i) a home address of the mobile node and (ii) an address of the home agent</u>;

means for forwarding the registration request to the home agent, the request including the tunnel identifier;

means for establishing a connection;

means for receiving a registration response and forwarding the registration response to the mobile node;

means for receiving packets of data from the home agent, each of the packets of data including the tunnel identifier; and

means for <u>using the tunnel identifier to identify</u> ~~determining~~ the connection for packets having the tunnel identifier.

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22.   (currently amended)   A system comprising:

means for receiving a registration request;

means for receiving a data stream, the data stream associated with the registration request, the data stream including a plurality of packets;

means for assigning an identifier to the data stream, wherein the identifier is independent of (i) a home address of a mobile node and (ii) an address of a home agent for the mobile node;

means for transmitting the registration request to a home agent, the registration request including the identifier;

means for receiving return packets of information, the return packets of return information including the identifier; and

means for translating the identifier into a connection and transmitting the return packets using the connection.

23. (currently amended) A computer readable medium having stored therein instructions for causing a processing unit to execute the following method:

receiving a registration request;

determining a tunnel identifier, wherein the tunnel identifier is independent of (i) a home address of a mobile node and (ii) an address of a home agent;

transmitting the registration request to the [[a]] home agent, the registration request including the tunnel identifier;

receiving a response to the request and, responsively, activating a connection;

receiving data packets from the home agent in response to [[the]] transmitting the registration request, the data packets including the tunnel identifier;

identifying the connection using the tunnel identifier; and

routing the packets along the connection.

24.   (currently amended)   A computer program for establishing a connection between a mobile node and a home agent, the program comprising:

first code for receiving a registration request;

second code for determining a tunnel identifier, wherein the tunnel identifier is independent of (i) a home address of the mobile node and (ii) an address of the home agent;

third code for transmitting the registration request to the [[a]] home agent, the registration request including the tunnel identifier;

fourth code for receiving a response to the request and, responsively, activating a connection;

fifth code for receiving data packets from the home agent in response to [[the]] transmitting the registration request, the data packets including the tunnel identifier;

sixth code for identifying the connection using the tunnel identifier; and

seventh code for routing the packets along the connection.